

UTAH'S GREAT SUGAR INDUSTRY

...look back only fifteen years ago, and he will discover that the pound of refined beet sugar had not been manufactured in Utah. The Territorial Legislature of 1890 passed a sugar bill granting 2 cents per pound for all refined sugar that could be manufactured in Utah. This bill was a wise measure. It gave a stimulus to capital to invest in the sugar industry, and it was a result of it that has shown the sugar industry in Utah to be a profitable investment to the capital.

After the passage of the sugar law, a company was organized to manufacture sugar, called the Utah Sugar Company. After a thorough search for the most available location, the most suitable farming district for the raising of the sugar beet, a place was selected near Lehi, in Utah.

A small beginning in 1891 the crop of beets cut that year, not exceeding 10,000 tons, this enterprise has increased to the present hand-cut of over twelve times that amount in a single year at this factory alone.

The Garland Factory.

Utah Sugar Company has recently secured a fine beet sugar factory, the most improved pattern and employing the most up-to-date methods, in Garfield county at a new town called Garland. This factory is of 600 tons capacity per day of beet cutting.

The first past was its second successful year. This same company has similar cutting plants at Spanish Fork, Provo, and Panguitch. The juice from the sugar beets cut at all of these plants is pumped to the Lehi factory through its pipe line connecting a distance from twenty to thirty miles.

Plants in Idaho.

Utah Sugar Company has also a plant at Idaho Falls, Idaho, commencing its second year, cutting over 30,000 tons of sugar. A factory will be erected in the Teton basin, and will add considerably to Idaho's sugar production.

Amalgamated Factories.

Sugar manufacturing having proved to be a success in Utah, another company has been organized besides the Utah Sugar Company, called the Amalgamated Sugar Company, owning the factories at Ogden and Logan, and also the sugar factory at La Grande, Or., with headquarters at Ogden.

The Ogden factory has had a very successful run this year, and will not be able to get through its cutting until the end of January. Its managers expect to cut by the end of the campaign, as the run is called in sugardom, near 68,000 tons of beets.

The factory at Logan will close at an earlier date and it is expected will cut a little over 40,000 tons of beets.

The farmers have received from these two factories over \$475,000 for this year's crop of beets, the average price per ton being nearly \$4.50 delivered at the factory. The amount paid for wages to employees was over \$125,000.

The production of refined beet sugar will be over 24,000,000 pounds, or 240,000 tons, raised on about 10,000 acres of ground.

There is a great difference in the land suitable for the raising of sugar beets, some ground producing as high as twenty-five to twenty-seven tons to the acre and other ground running as low as four tons, the average being from eleven to twelve tons per acre in the Ogden and Logan districts.

Production of Sugar.

Beets	Tons	Pounds	Average
Lehi	112,250	24,700,000	19.10
Ogden	21,800	4,800,000	2.20
Logan	68,300	15,150,000	6.25
La Grande	40,000	9,000,000	2.25
Total	242,350	54,250,000	22.70

This would make 562,000 bags, or 25,100 tons of sugar.

The prospects are very flattering for the coming year, and an additional factory will be built for Ogden and Sevier valleys, and possibly one at Lewiston, in Cache valley.

Prices Paid for Beets.

The prevailing prices of beets at the factories have been from \$4.25 to \$4.75 per ton, the average price being \$4.50 per ton, the price being governed by the amount of saccharine matter in the beet.

A GENERAL REVIEW.

Utah's output of beet sugar for 1934 will approximate 60,000,000 pounds, representing a total value of \$3,600,000. To produce this amount of sugar required about 250,000 tons of beets, for which the farmers who raised them were paid \$1,100,000. For the labor employed in the four factories in the State something over \$250,000 was paid, with large sums also expended for coal, lime rock, freights, bags and general supplies.

The Companies, Location of Plants and Organization.

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What Japanese Trains Are Like.

The railway traveler in Japan buys a first, second or third class ticket; or, if he wishes to go cheaper still, he can get a ticket entitling him simply to stand on the platform. Many of the cars can be entered either from the side or the end. The principal difference between the first, second and third class coaches is the color of the upholstery. None of the cars are very clean. Many of the third class coaches could serve, without much alteration, as ordinary pigsties. This is all the more remarkable when you consider that the Japanese are the cleanest of people, even of the humblest, is taken into consideration. An explanation of this may be that the Japanese have little regard for the cleanliness of any place where they keep their shoes or clothes on. There are 500 coaches in the train, which has been established in a few Japanese homes, is the only apartment in the whole house that is not kept scrupulously swept, dusted, oiled and polished. To, too, who are maintained in native style are sweet and clean; those that have become Europeanized are usually littered with cigarette stumps, fruit peelings and cores, and other debris.

Successful Reclamation Scheme.

The Hammond Canal company, of which Hon. James T. Hammond of Salt Lake City is president, constructed a canal on the east side of Bear River in Box Elder county during the year. The main canal is about twenty-seven miles long, with about ten miles lateral canals, with about \$75,000, and it covers 18,000 acres. The present capacity of the main canal is 12,000 acres.

AGRICULTURAL DEPARTMENT.

The total number of acres surveyed and approved by the Surveyor-General up to December 31, 1934 (not including the Utah Indian reservation), is 26,617,134.69. During the year 1934 surveys have been approved covering an area of 1,045,233.23, involving a mileage of 2396 miles, 49 chains, 82 links (not including the Utah Indian reservation), are located as follows:

County	Acres	Value
Box Elder	48,238.29	\$7,700.00
Carbon	17,700.00	2,700.00
Emery	4,274.64	671.91
Grand	22,901.34	3,624.21
Juniper	43,705.84	6,952.93
Kane	11,511.12	1,841.78
Sage	49,734.94	7,759.59
Sevier	42,826.59	6,832.25
Utah	57,336.39	9,173.82
Washington	27,828.00	4,452.48
Wayne	1,645,233.23	255,285.28
Total	1,645,233.23	255,285.28

There remain thirty-seven full and fractional townships, involving a mileage of 4612 miles, 12 chains, 99 links, and embracing 1,385,504.41 acres, have been approved. These are all filed, being worked up, and will be forwarded to Washington during the present month.

In Utah operate seven factories and four auxiliary plants in this State and Idaho. These are as follows:

Utah Sugar company, capital \$6,000,000, with plants at Lehi and Garland of 1200 and 600 tons daily capacity, respectively.

Amalgamated Sugar company, capital \$2,500,000, with plants at Ogden, Logan and La Grande; capacity 350, 600 and 350 tons, respectively.

Idaho Sugar company, capital \$1,000,000, with plant at Idaho Falls of 600 tons capacity.

Fremont County Sugar company, capital \$1,000,000, with plant of 600 tons capacity at Sugar City.

The factories at Lehi and Sugar City are the only beet sugar plants in the United States which are fed by auxiliary plants. The Lehi factory is connected by pipe-lines with auxiliaries at Provo, Springville and Spanish Fork.

The Utah Sugar company during the year built a railroad from a point near Fremont, on the Malad Valley line, to Thatcher, seven and a half miles in a westerly direction. This brings the farmers of that locality in direct communication with the factory at Garland.

The factory at Garland will be enlarged the present year. Railroad spurs will be built by the Idaho Sugar company and the Fremont County Sugar company, which will open new beet districts, and doubtless necessitate the enlargement of these companies' factories next year. The new factory projected for Lewiston will be built as soon as it is demonstrated that Cache county can grow enough beets to warrant it.

The two Idaho factories have been so constructed that the capacity of each can be doubled at comparatively small outlay, and this will be done as soon as the additional acreage of beets is grown to justify it. It is likely that these two companies will be merged into one during the year.

With the improvements thus outlined the annual output of the Utah and Idaho factories will be increased to about 150,000,000 pounds, and it is believed that this will be accomplished in a very few years.

President Cutler on Markets.

President Cutler of the Utah Sugar Company, in speaking of the industry, said: "The sugar industry in Utah has reached a stage when it has to solve the problem of finding markets outside of the intermountain country for its increased surplus. With this in mind the Utah Sugar company has been laying foundations for other enterprises, by constructing one of the most complete irrigation and power systems in the West. During the past year it has been developing the power of the Light and Railway company, and has just installed its third unit of one thousand-horse-power. The company has distributed water, exclusively for irrigation, to 40,000 acres of land, and has been raising the value of the 100,000 acres raised on the lands last season. The soils of the Bear River valley are admirably adapted not only to the raising of sugar beets, but to hay, grain and fruits as well. It is predicted that in the near future the apple crop will be the most important one raised in that region."

Since the Ogden factory has been running its beet supply has been increased from 15,000 tons the first year to 57,000 tons last year. There were 520 farmers who contracted last year to

raise beets, the acreage of each running from two to twenty, with an average of four or five acres each. The farmers received a total of \$250,000 for their beets in the region from Farmington on the south to Brigham and Honeyville on the north, with a few beets from Morgan. In this scope of country there are seventeen canneries. Some of the land is found to be better adapted to the raising of tomatoes than to the growing of beets, but much of the land that used to be planted to tomatoes is now entirely devoted to beets. The beets are hardy and withstand the late and early frosts, and some of the farmers prefer a sure \$75 an acre from their land to a risky \$100, although many realize more than \$100 an acre from their beets.

It is true that we paid a flat price of \$5 a ton for beets the first year or two years ago, but the Utah factories were running, but it must be remembered that we were then receiving bounties of 1 cent a pound from the State and 2 cents from the National Government, no part of which we now receive. It might also be borne in mind that aside from furnishing the farmers of Utah with a market for an additional profitable crop, the sugar industry since its establishment in Utah has kept in the State \$14,000,000 that otherwise would have been sent out of the State for sugar and has brought \$10,000,000 more to the State in payment for the sugar exported. We are giving the beet-growers every encouragement possible, and that is why we are dividing with the farmers at a distance from the cutting stations the cost of transportation. It is true that those directly at the doors of the factories have a slight advantage, but the average net price paid for beets to those at a distance is \$4.75 a ton.

President Cutler refused to give any figures on the year's beet crop in Utah and Idaho or on the output of the sugar factories in these States, giving as a reason that the figures would be misquoted by Eastern trade journals, causing the sugar people no little trouble. The information is gained from an unofficial source, however, that the output of the Utah and Idaho factories is fully 50 per cent greater than that of 1934, the gain being due to increased acreage of beets, a larger yield than usual and a better grade of beets. Mr. Cutler said that the advantage in sugar was due to drought in some of the principal beet-producing countries, causing a short crop.

THE LEHI FACTORY.

Origin Recalled—An Excellent Lesson—The Seed Station.

LEHI, Dec. 26.—On the day that this appears in print the Lehi sugar factory will cut the last beet and sack the last bag of sugar of this season's run. The factory will have been in operation just one hundred days, which by sugar men is considered the ideal length of time that a factory should be in operation each year. The factory has been in operation for fourteen years and was one of the first beet sugar factories successfully operated in America, and the first to be built in the arid region. For this reason, a history of the Lehi sugar factory is a history of the beet sugar industry of America.

In the early 1890s when Utah Sugar stock was selling at 50 cents, there was no beet sugar factory in the country making dividends, and so too this, the banner year in the history of the Lehi factory, is also considered the banner year in the beet sugar industry of the United States.

The output of the Lehi factory will reach about 25,000,000 pounds of sugar this year, being an increase of 5,000,000 pounds over an prior campaign. The plant has 8000 and 9000 acres of land produced 111,000 tons of beets. These figures represent the largest acreage and tonnage and the most pounds of sugar that the factory has ever produced. During a prior year there has been a higher tonnage per acre and also during

ARGUES THAT THEY PAY MORE THAN EVER FOR BEETS.

"We are paying more per ton in the aggregate for beets than we have ever paid before," said President Thomas R. Cutler of the Utah Sugar company when questioned concerning the complaint of the farmers on account of the reduction to them of the price of beets, while sugar is higher than before. "The way it comes," he explained, "is that we are now paying a share of the freight from the fields to the factory and cutting stations. When we established a cutting station at Bingham Junction it was with the agreement that 3000 acres of beets were to be grown in that vicinity and that we were to have free water power. Neither provision is up, so many sugar growers are not blaming the farmers for this, but the failure was due to circumstances over which they had no control. But we had to remove the cutting station to Lehi, at considerable expense to us. Then the question of the freight to the new cutting station arose. The rate

which she applies upon every possible occasion. Whatever Japan borrows she makes Japanese; she molds it into conformity with Japanese characteristics, and in many cases changes its original form altogether. Since Commodore Perry sailed into the bay of Yeddo in 1853 she has borrowed an unlimited supply, and systematically, from every corner of the globe. She doesn't hesitate to borrow trade marks which are not registered in Japan. She goes to England or America, Germany or France, and borrows a trademark, and then she might meet some of her own necessities, add to her resources, her attractiveness, or her pleasure, and bringing it across seas, copies it, name and all, and sells it as a Japanese product. Every one knows that the Japanese are not a very original people, and which appeals in the slightest degree to her amazing self-interest, Japan will appropriate without an instant's hesitation, smiling all the time with that shrewd suavity which makes her a very successful borrower. She is kicking something—I may so express a feeling familiar to all my dear countrymen who have lived in Japan.

There are few useful commodities manufactured in Japan which are not being sold in Japan masquerading under a very thin Japped American trade mark, or sometimes not masquerading at all. And along with everything else they have appropriated came the American spirit of advertising, which is the funniest thing in Japan.

Between Kobe and Kioto the country lying along the seashore was a splendid imitation of the Jersey flats, being then unplanted rice swamps, and all along on either side of the railroad were glaring enormous billboards, signboards, standing up on the regulation stilts so familiar to travelers through New Jersey, or anywhere else in America, for that matter. The street cars in Japan are filled with advertising cards as are all the newspapers. It is the American system, adopted wholesale, with all its disfiguring features.—Eleanor Franklin in Leslie's Weekly.

ATHLETES

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ing another year the beets have gone higher in sugar contents, but considering the subject from every phase of the question and striking an average from them all the campaign just closing has never been approached.

The Operations.

The factory's operation has never been exceeded and General Superintendent James H. Gardner, from whom there is no more efficient sugar man in the West, says that the factory has never been in so good a condition at the close of a campaign as at the close of the present one. Ordinarily, it has been necessary to stop every fourteen or twenty days for a general "clean up." This year there has been but one "clean up" and during this stop 800 tons of beets were sliced. The general average of beets sliced per day has never been so high, the daily average being 1110 tons. During one twenty-four hour shift 3500 bags of sugar were sacked which is also a record and the general average for the one hundred days is 2500 bags per day.

Superintendent Gardner also stated that the grade of sugar made this season has never been surpassed, and it will be remembered that the Lehi factory holds the gold medal for the World's fair certifying Lehi sugar to be the best beet sugar ever made. Mr. Gardner attributes the superiority of the Lehi sugar to the fact that two-thirds of the juice after it is extracted from the beets travels a distance of from seventeen to twenty-two miles through a pipe line during which time it becomes so thoroughly mixed with the sliced lime, put in as a preservative, that when the latter is extracted all the impurities are taken out with it.

The Cutting Stations.

The three raparee or cutting stations at Provo, seven and a half miles, Spanish Fork, two miles, and Spanish Fork, two miles are all connected with the central plant at Lehi by pipe-lines.

The ones at Provo and at Spanish Fork are on a separate line, built of four-inch pipe. These three stations cut about two-thirds of the beet crop, the other third being cut at Lehi. Excepting the factory which was constructed at Sugar City this year, the Lehi factory is the only plant in America that has cutting stations and the pipe-line connecting the Spanish Fork raparee is the longest of its kind in the world. The management stated that the cutting stations were highly successful this year. While they are obviously more expensive to maintain than if the beets could be delivered at the main factory, they have the effect of securing a larger acreage from the farmers and the pulp being distributed over a larger area finds a more ready sale, this year the pulp having been sold to cattle and sheep men long before the factory commenced cutting beets. These advantages coupled with the fact that the system enables better sugar to be made, stamps the raparee system with the stamp of success. The Lehi factory was also the pioneer in America in the introduction of the osmotic process whereby the low-grade syrup is made into brown sugar, instead of being turned into the sewer. The Lehi plant has purchased all the low-grade molasses from Garland and converted it into brown sugar.

The Farmer Makes It.

Primarily the success of the beet sugar industry depends on the farmer. General Field Superintendent George Austin says that a more amicable understanding never existed between the farmers and the factory

Will Close With a Banquet.

The company, as a token of good fellowship toward its employees, will give a grand banquet and ball to all of its employees, their wives and sweethearts. The affair will be complimentary, and will be given January 4.

management than during the past season. The farmers had good crops this season, and with but few exceptions received \$4.75 per ton for their beets, which means that the Lehi factory paid out to the farmers this year about \$425,000 for beets alone. The farmers have largely adopted the use of self-dumping wagons, and the factory people have reconstructed their beet sheds to accommodate the use of these new wagons. The prospects are good for an increased acreage next year, which is the best evidence of the satisfaction of the farmers.

The Side Station.

Another important feature developed this year was the establishment of an experiment station at the Saratoga farm west of Lehi by the Department of Agriculture at Washington. The experimenters have been under the direction of Prof. C. O. Townsend, an eminent scientist, and have been conducted with the object of producing a single germ seed. It is well known by beet growers that each seed planted will produce from two to six plants. These are called "single germ" and "double germ" and the work of removing all but one entails no small amount of labor amounting to hundreds of thousands of dollars annually to the farmers of America. The experimenters are working on the careful selection of seed and the preventing of pollen from multiple germ plants being carried by insects to a single germ plant, to produce a strain of but a single germ. Prof. Townsend stated that the necessary for American germ mother beets, also several thousand single germ seed this spring, and when the harvest time arrived he was delighted to find that the single germ mother beets had produced the majority of their seed of the single germ variety. He hopes by careful selection to have a strain in a few years that will produce single germ seed without fail. The beets produced from seed planted this season will be used as mother beets next year, and the station at Lehi will be a permanent thing at least for several years.

The department has also taken up the study of the cause and cure of the several diseases that affect the sugar beet, and has high hopes of finding an adequate remedy.

Also the Department of Agriculture has entered into co-operation with the Lehi sugar officials to assist in the production of sugar beet seed, at least to amount necessary for American consumption. Mr. Townsend said that George Austin, the general agricultural superintendent for the Utah Sugar company, was the best posted and most practical sugar beet man in the West, and that he had no doubt that Utah would solve the sugar beet seed problem, and that he had great faith in materially increasing the sugar content over that contained in the beets grown from European-grown seed.

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